

ABSTRACT OF THE DISCLOSURE

Embodiments of the present invention relate to methods and systems for automatically determining the network topology of a computer network containing unnumbered or unaddressed links between network devices, such as routers. The method according to one embodiment uses the network management information data available with each router. From the information, the embodiment can determine all routers connected to a given unnumbered interface. The embodiment can also automatically determine which of these routers is the immediate neighbor by comparing how they connect (via interface number) to the unnumbered interface and how they connect to each other. If the immediate neighbor is found to have a route back to the examined router or a default route, a link between the immediate neighbor and the unnumbered interface can then be stored and identified in the network topology. The method can be repeated in cycles to determine topology changes.

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